

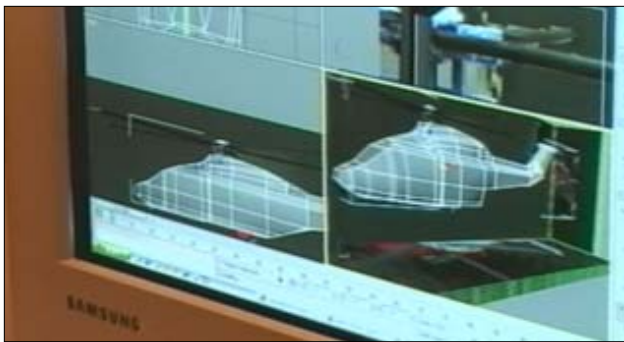
At the asset level, ILS requirements have been

incorporated into the system requirements specification of each asset during design review — to date the 123-foot Patrol Boat, NSC, C4ISR and VUAV. The integration of ILS performance requirements across the domains will inform designs on the basis of supportability, maintainability, reliability, and reduced total ownership costs. The scope of ILS improvements will cover maintenance planning, manpower, supply support, support and test equipment, technical manuals, training and training tools, computer support, facilities,

packaging, handling, storage, and transportation, and are incorporated into the full product life-cycle, from design to disposal.

Logistics support—at both the asset and system-wide levels—will encompass total life-cycle planning, integrated government-contractor support, performance-based logistics, and provisions for continuing feedback. Under the ILS concept, the best-business practices of the Coast Guard and its ICGS partner will be coupled to form the most efficient logistics system possible.

Beginning with the 110-foot to 123-foot Patrol Boat conversions, new ILS support programs and



Evolving technical design information on each of Deepwater's assets is retained in the Integrated Product Data Environment (IPDE). The IPDE provides a single database for program performance and metrics.

processes will be implemented incrementally as upgraded or new Deepwater assets become operational. The 123-foot Patrol Boats conversions, followed by Deepwater's new Maritime Patrol Aircraft (MPA), will serve as springboards in developing improved ILS support for future platforms for all domains.

The ILS program management is based on several organizational constructs. Foremost among them is an Integrated Product Data Environment (IPDE) information system to provide a single database for program performance and metrics. Evolving technical design information on each of Deepwater's assets is retained in the IPDE, as well as the processes needed to support IDS product teams. A series of functional Integrated Product Teams (IPTs) ensure ILS involvement in all aspects of the Deepwater program—from a system-level perspective down to detailed design work in each domain.

A new Logistics Information Management System (LIMS) will automatically collect and process logistics data to project support requirements

and trends and will eventually be able to provide readiness assessments instantly to operational commanders. LIMS, which is now under development, will field its first of five iterations within 2003 in anticipation of the delivery to the fleet of the first 123-foot Patrol Boat conversion. Similar ILS innovation will be seen in its approach to human-centered design principles based on the allocation of requirements to personnel and accurate documentation of their workload. With its ability to bring the right information to the right people at the right time, LIMS will provide the backbone and software applications necessary to make Deepwater's vision of network-centric logistics a reality.

The fully implemented ILS will achieve significant cost avoidance in the Coast Guard's annual operating expenses for Deepwater assets and increase the time those assets can be at sea and in the air. Logistics requirements will be assessed during design trade-offs, single-point failures will be reduced, proven state-of-the-market technology will be introduced, and a continuing-improvement program will generate future performance increases. IDS assets will be designed for improved maintainability through concurrent engineering, a "remove-and-replace" concept for components and modules, and simplified repair tasks. Eventually, Coast Guard crews will have maintenance-support technologies to provide step-by-step computer generated instructions and 24-hour expert assistance made available through remote support services. Increased reliability and improved supportability will result in more operational time for air and surface platforms at less cost.

Deepwater's Integrated Logistics System (ILS), which is being designed in tandem with the development of the Deepwater ships and aircraft, will in many ways provide the solid foundation needed to support this extraordinary transformation of the Coast Guard's operational capabilities. Collectively, the numerous components of this evolutionary project will lead to near-revolutionary improvements in the Coast Guard's ability to provide totally integrated logistics support for the entire Deepwater system and its individual platforms. The Deepwater ILS, designed to interface with the Coast Guard's current logistics infrastructure, will ensure that all Deepwater platforms are not only ready on arrival, but remain so during their operational assignments.